

Appl. No. : 10/799,337
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AMENDMENTS TO THE CLAIMS

Claims 1-18, 20, and 21 were pending prior to the entry of these amendments. Please add new Claims 22-31.

1. **(Previously Presented)** An apparatus for treating diseased skin with ultraviolet (UV) light, the apparatus comprising:

a source of UV light within the range of 300 and 315 nanometers and including an intensity between about 16 and 20 minimum erythema doses (MED); and
a cooler for cooling the diseased skin to below about 0 °C.

2. **(Previously Presented)** An apparatus for treating an area of diseased epidermal tissue with ultraviolet UV light, the apparatus comprising:

a source of high intensity ultraviolet light between about 16 and 20 minimum erythema doses (MED) in the wavelength range of between about 300 and 315 nanometers having an output for emitting the UV light;

a conduit positioned to receive said ultraviolet light, said conduit having an output end that emits said UV light;

a delivery device that includes said output end of said conduit; and

a cooler included in said delivery device configured to cool the skin to lower than about 0 °C.

3. **(Original)** The apparatus of Claim 2, wherein said delivery device has a localized UV output sufficiently small to illuminate a portion of skin no larger than said area of diseased epidermal tissue.

4. **(Previously Presented)** A method for treating an epidermal region comprising diseased tissue, the method comprising:

cooling the diseased tissue to below about 0 °C and exposing the diseased tissue in said epidermal region to a dosage of ultraviolet light between about 16 and 20 minimum erythema doses (MED) in the wavelength range of between about 300 and 315 nanometers.

5. **(Previously Presented)** The apparatus of Claim 1, wherein the source of UV light comprises an excimer laser.

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6. **(Previously Presented)** The apparatus of Claim 1, wherein the source of UV light has central operating wavelength at about 308 nm.

7. **(Previously Presented)** The apparatus of Claim 1, wherein the cooler comprises jets configured to spray the skin with a cool liquid, gas, or air.

8. **(Previously Presented)** The apparatus of Claim 1, wherein the cooler comprises a chilled UV transparent substrate.

9. **(Previously Presented)** The apparatus of Claim 8, wherein the cooler further comprises a thermoelectric cooler.

10. **(Previously Presented)** The apparatus of Claim 1, wherein a cooler is configured to cool the diseased skin to below about -5 °C.

11. **(Previously Presented)** The apparatus of Claim 2, wherein the source of high intensity ultraviolet light comprises an excimer laser.

12. **(Previously Presented)** The apparatus of Claim 2, wherein the source of high intensity ultraviolet light has a central output wavelength of about 308 nm.

13. **(Previously Presented)** The apparatus of Claim 2, wherein the cooler comprises a channel configured to spray the skin with a cool liquid, gas, or air through an opening therein.

14. **(Previously Presented)** The apparatus of Claim 2, wherein the cooler comprises a chilled UV transparent substrate.

15. **(Previously Presented)** The apparatus of Claim 2, wherein a cooler is configured to cool the diseased skin to below about -5 °C.

16. **(Previously Presented)** The method of Claim 4, wherein the epidermal region exposed to ultraviolet has an area between about 1 cm² and about 4 cm².

17. **(Previously Presented)** The method of Claim 4, wherein cooling comprises spraying the skin with a cool liquid, gas, or air.

18. **(Previously Presented)** The method of Claim 4, wherein cooling comprise contacting the diseased tissue with a chilled surface.

19. **(Canceled)**

20. **(Previously Presented)** The method of Claim 4, wherein the diseased tissue is cooled to below about -5 °C.

21. **(Previously Presented)** The method of Claim 4, further comprising determining the MED of a patient having said epidermal tissue.

22. **(New)** An apparatus for treating diseased skin of a patient with ultraviolet (UV) light, the apparatus comprising:

a source of UV light within the range of 300 and 315 nanometers;

a user interface configured to receive input specific to the patient;

a computing device in communication with the user interface, the computing device configured to automatically calculate the dosage of the UV light based on the input, the dosage being between about 16 and 20 minimum erythema doses (MED); and

a cooler for cooling the diseased skin to below about 0 °C.

23. **(New)** The apparatus of Claim 22, wherein the input comprises a treatment multiplier, and wherein the computing device is configured to multiply the MED of the patient by the treatment multiplier to arrive at the dosage.

24. **(New)** An apparatus for treating an area of diseased epidermal tissue of a patient with ultraviolet (UV) light, the apparatus comprising:

a source of high intensity ultraviolet light between about 16 and 20 minimum erythema doses (MED) in the wavelength range of between about 300 and 315 nanometers having an output for emitting the UV light;

a computing device configured to automatically vary the dosage of the UV light to determine the MED of the patient;

a delivery device having an output for delivering said ultraviolet light to said diseased epidermal tissue; and

a cooler configured to cool the skin to lower than about 0 °C.

25. **(New)** The apparatus of Claim 22, wherein the computing device automatically increments the MED determination without further input from an operator of the apparatus.

26. **(New)** The apparatus of Claim 22, further comprising a conduit positioned to receive said ultraviolet light, said conduit having an output end that emits said UV light.

27. **(New)** The apparatus of Claim 26, wherein said delivery device includes said output end of said conduit.

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28. (New) The apparatus of Claim 22, wherein said cooler is included in said delivery device .

29. (New) The apparatus of Claim 22, wherein the computing device automatically vary the dosage without further input from an operator of the apparatus.

30. (New) The apparatus of Claim 22, wherein the computing device automatically varies the dosage by 50 mJ/cm^2 , or 100 mJ/cm^2 , 150 mJ/cm^2 , 200 mJ/cm^2 , or 250 mJ/cm^2 .

31. (New) The apparatus of Claim 22, wherein the computing device automatically increases the dosage.